

# Our Salton Sea Initiative

## Track Two

### Institutional and Community

### Perspectives on Economic Development

APRIL 2022



Salton Sea, California, USA

Photo Credit: Alianza Coachella Valley

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## EXECUTIVE SUMMARY

In recent years, the concept of inclusive and equitable growth has become central to the conversations surrounding economic development and recovery. Before being exacerbated by the COVID-19 pandemic, income inequality had been rising in the United States. For example, despite one of the longest economic expansions in US history, the Gini index reached 0.485 in 2018—the most inequitable level of income distribution recorded in the United States since the Census Bureau began tracking the metric.

While governments at all levels have tried various means to address these inequities, many of these reforms have proven limited in changing deeply entrenched systems. A look at the history of economic development clearly shows the persistence of structural factors that have disadvantaged communities of color.

The mixed-method findings from this report point to both the need and opportunity for greater inclusive economic and workforce development in the Salton Sea region and surrounding communities. The convergence of increasing investments in “Lithium Valley” and the commitments from state and federal governments to promote inclusive economic recovery, (see the Biden Administration’s Build Back Better Regional Challenge (BBBRC) and California’s Community Economic Resilience Fund (CERF), have opened a window of opportunity for the region to cement inclusive economic and workforce development as the new standard. Having greater and more robust community inclusion in decision-making means not only inviting in but also listening to, learning from, and respecting the perspectives of experts in local communities and local economies—including residents and workers who have firsthand knowledge of benefits as well as challenges, and barriers as well as solutions. Mechanisms highlighted in this report like Public Private Community Partnerships can be used to do some of this work, and frameworks like Ready to RISE can help ensure accountability and long-term success.

Importantly, greater community inclusion is not only a moral imperative, it is also sound economic policy. There is a plethora of bipartisan research that details the numerous economic benefits of creating a more inclusive economy. Everyone, including historically marginalized and excluded communities, would benefit from greater inclusion and participation. With this in mind, equity and inclusion in economic and workforce development is not merely an option, it is a necessity.

## BACKGROUND

The Salton Sea region of Southern California was once a top leisure destination. Today it has high concentrations of poverty, both polluted air and water, and some of the worst community health metrics in the state. For instance, a review of the CalEnviroScreen 4.0 scores for the region directly surrounding and adjacent to the Salton Sea itself shows that areas in Eastern Coachella Valley and Imperial Valley have scores of 49 and higher (out of a possible 100).

Notably, CalEnviroScreen scores are an aggregate of several indicators, broadly categorized under “pollution burden” and “population characteristics”. In general, the higher the score, the greater the environmental burden on that particular area/population. Policymakers have often viewed such areas as key investments for regional equity efforts. In reality, however, policies, programs, and initiatives - all under the guise of “community economic development” - have frequently overlooked the “community” component, with the result often being that long-term benefits do not materialize for the regions and groups who often end up simply bearing the greatest burden.

The economy of the Salton Sea region is largely driven by industries such as agriculture, retail, and hospitality, which are often low-wage and do not always come with benefits. There are a fair amount of jobs in the health-care sector, which tend to be higher paying, but there is still a significant wage gap between healthcare (typically higher paid) and healthcare adjacent (typically lower paid) jobs. Currently, there is the potential for emerging technological investments such as solar power generation and lithium extraction (lithium is a key component of battery manufacturing, which is crucial to electrification efforts) to provide economic growth and good jobs (e.g., higher wages, benefits, stable hours).

The UCR project team was tasked with understanding the potential for inclusive economic development within the region, with the ideal hope of better jobs, more opportunities, and an overall brighter economic outlook. As part of this analysis, the UCR project team analyzed the work done by the UCSC team, to better understand the various theoretical approaches to envisioning and actually implementing an inclusive economic development strategy, and then through a mix of qualitative and quantitative methods, ground-truthing to what degree they would work in the region’s particular socio-economic-political situation. As part of this process, both the UCSC and the UCR team co-authored a Policy Brief that introduced the idea of inclusive economics, laid the framework to connect the theoretical base idea of inclusive economic development to current fiscal policy, and explored what that could look like in terms of how

**FIGURE 1: PROPOSED SALTON SEA INCLUSIVE ECONOMY INDICATOR FRAMEWORK**

<b>Salton Sea Region Inclusive Economy Indicator Framework</b>	<b>Broad Indicators</b>	<b>Sub-Indicators</b>
	1. EQUITY	Upward Mobility
		Reduction of Inequality
	2. INCLUSION	Participation in Markets
		Decision-making
	3. GROWTH/STABILITY	Work Opportunity
		Stability
Dignified Work		
4. SOCIOLOGICAL HEALTH	Ecological Health	
	Community Health	
5. ACCESS TO OPPORTUNITY	Commute	
	Transportation, Affordable Housing & Infrastructure	

Source: Edenhofer and Artiga-Purcell, 2021

policy gets conceptualized and enacted. For example, the inclusive economy indicator framework (Figure 1) that was developed by the UCSC team for track one of this project was presented to community members for feedback and refinement.

This exercise was also intended to better understand what inclusive economic development processes could look like, and in particular to dig deeper into what inclusive community involvement means for different stakeholders. UCSC’s literature review on the types of economic development worldwide that are considered to be “transformative” uncovered that such developments are also often considered to be extractive. Thus, a significant part of UCR’s ground-truthing focused on the inclusion aspect of the overall process, particularly the conceptualization and outreach/input phases. We sought to understand to what degree current efforts fit within the solidarity economics framework (which is based upon the idea that mutuality and cooperation are the foundations of thriving economies), to what degree the regions’ residents and stakeholders felt the process included any of the UCSC team’s proposed inclusive framework elements, and what their thoughts were on the potential benefits of this type of new approach to future planning efforts. Within the context of potential investments into renewable energy, be they solar or

lithium extraction to support battery manufacturing, there is a major concern that this particular type of investment could become simply extractive. This was echoed again and again in the qualitative outreach we conducted. For instance, questions of ‘who gets the jobs’ and ‘who ultimately benefits, and who really shoulders the costs’ came up multiple times throughout the process, which aligned with the equity and inclusion broad indicators from the proposed inclusive economy framework. And there is some context for this: while this is partially due to this situation historically playing out again and again worldwide, the region itself has been told one thing and experienced a completely different outcome in multiple situations.

Community inclusion is essential for producing the type of equitable economic development that would be most responsive and beneficial for a unique region like the Salton Sea. In this context, we define equitable development as having investments, policies, and practices that intentionally focus on improving outcomes for historically marginalized populations, and that actually improves outcomes for these populations and communities. In particular, we propose that more inclusive processes can result in the type of shared governance necessary to promote equitable economic and workforce development in the region. For example,

**FIGURE 2 - PROPOSED METHODS TO ADDRESS PARTICIPATION AND DEVELOPMENT STRATEGIES**

	<b>Internal (Pre-existing Economic Conditions)</b>	<b>External (Large-scale Outside Investment)</b>
<b>Development Strategies</b>	What are the best economic development strategies based on what is already in a region? → Qualitative (e.g., interviews, focus groups)	What are the best economic development strategies amid large-scale outside investment? → Qualitative (e.g., interviews), Quantitative (e.g., regional economic data)
<b>Participation</b>	What participatory institutions empower community control of the economy? → Qualitative (e.g., interviews, power mapping)	What participatory institutions ensure community control over how new large-scale investments develop? → Qualitative (e.g., focus groups, power mapping), Quantitative (e.g., regional economic data, projection)

**FIGURE 3 - QUESTIONS FOR ANALYZING MEANINGFUL PARTICIPATION TEXTUAL ANALYSIS**

1. WHAT ARE THE POLITICS AROUND PARTICIPATORY SPACE?
2. HOW MEANINGFUL IS THE PARTICIPATION AND WHAT PURPOSE DOES IT SERVE?
3. WHAT ARE THE SPACES OF DECISION MAKING AND PARTICIPATION?
4. WHO IS PARTICIPATING?
5. WHAT IS THE SCOPE?
6. WHAT ARE THE NECESSARY CONDITIONS FOR MEANINGFUL PARTICIPATION?



our Ready to RISE Framework offers clear standards and mechanisms for community input and inclusion that empowers community, giving them a seat at the decision-making table from the very beginning of a project or initiative. Utilizing an inclusive framework, like Ready to RISE, is essential for promoting greater resilience, inclusion, sustainability, and equity in the Salton Sea region as these massive economic and workforce opportunities begin to unfold.

### PARTICIPATION AND DEVELOPMENT STRATEGIES

In order to better understand the options for and impact of various development strategies, it was important for us to isolate the various conditions that may serve as key factors in understanding optimal/less-optimal strategies, as well as to what extent participation is inclusive and thus provides the community with a voice and agency.

The UCSC’s literature review revealed several different development and participation strategies that could be used in an area similar to the Salton Sea region. As part of this analysis, the UCSC team proposed that there are two major factors at play in any economic development initiative: internal (which we can define as pre-existing economic conditions) and external (which we can define as outside factors). Geographies like the Salton Sea region are most likely particularly impacted by external factors, since in almost all scenarios investment would come from outside the region. The UCSC team then took the information gained from the literature review and created an internal/external matrix that was then populated with questions that the UCR team was then going to work on ground-truthing (Figure 2). As part of our analysis, we then used the matrix to start figuring out which types of analysis methods might make the most sense to start answering each question. For the most part, we determined that the internal questions that would address pre-existing economic conditions would be best addressed by qualitative methods (e.g., interviews and focus groups), whereas the external questions that would address large-scale external investment would be best address by a mixed methods approach (e.g., interviews, focus groups, quantitative data analysis).

Another part of this process was evaluating the questions the UCSC team identified as key to analyzing meaningful participation. As part of this textual analysis, themes and key words were identified, to help better understand important points of consideration, as well as key variables to be aware of.

The textual analysis largely focused on three themes: process, inclusion, and power. This became particularly important as the formal process by which community and economic decisions are made is technically designed to include community participation and thus feedback, but this tends to not happen in practice and has been documented as such in both academic literature and by practitioners on the ground. However, this poses a theoretical and practical challenge, as inclusive economic developments are by their very nature supposed to be inclusive, and yet there is extensive evidence that this does not actually happen. Ideally, an inclusive process involves “learning, relationship building, ownership” (Lachapelle, McCool, and Patterson, 2003) as well as “collaboration, dialogue and interaction” (Innes and Booher, 2004), and addresses fairness, creating responsibility, and ensuring representation (McCool and Guthrie, 2001; Burby, 2003). Technical aspects of the process itself become issues. For instance, outreach efforts such as public meetings are mandated to ensure that there is at least a baseline level of effort put out to provide a platform for the public to provide input. However, the most common critique of this is that this does not actually achieve genuine participation, and as such public officials do not actually receive the information they need to make informed decisions (Innes and Booher, 2000). Additionally, power dynamics are a key variable to consider when trying to assess the inclusiveness of decision-making and policy approaches. In large part, this can be summed up by agencies simply going through the motions of participation versus providing the public with “the real power needed to affect the outcome of the process (Arnstein, 1969)”.

Considering the above, and the broader work done by the UCSC team on possibilities for inclusive economic development in areas like the Salton Sea region, our approach was designed to center on understanding the process (as it was advertised, as it was interpreted to have occurred, and reflections on how it could have gone/could go in the future); understanding who was involved, what inclusion has looked like, what inclusion could look like in the future; and understanding the power dynamics (historically, present, and how power is viewed in the region and by whom).

In large part, we deemed it important to understand as many public viewpoints as possible, to better understand who the trusted messengers are, and to understand why they are trusted by the public. Particularly due to the region’s demographic characteristics and historic lack of investment, it was determined that to the extent possible, as many hard-to-reach populations

**TABLE 1 - JOB OPENINGS BREAKDOWN BY TYPE IN THE SALTON SEA REGION, INCLUDING COMPARISON TO RIVERSIDE AND SAN BERNARDINO COUNTIES, 2019 AND 2021**

Salton Sea	Openings (2019)	Openings (2021)	Percentage Change (%)	R/SD Opening (2019)	R/SD Opening (2021)	R/SD Percentage Change (%)
Registered Nurses	2,445	2,442	-0.1%	24,679	30,854	25%
Retail Salespersons	1,399	1,669	19.3%	19,145	21,906	14.4%
First-Line Supervisors of Retail Sales Workers.	760	899	18.3%	11,598	13,155	13.4%
Software Developers, Applications	642	166	-74.1%	25,186	16,724	-33.6%
Customer Service Representatives	568	739	30.1%	17,399	19,662	13%

Source: Burning Glass Technologies

**TABLE 2 - JOB OPENINGS BREAKDOWN IN RIVERSIDE AND SAN BERNARDINO COUNTIES 2019 AND 2021**

Riverside & San Diego	Openings (2019)	Openings (2021)	Percentage Change (%)
Software Developers, Applications	25,186	16,724	-33.6%
Registered Nurses	24,679	30,854	25%
Sales Representatives, Wholesale and Manufacturing	21,452	19,946	-7%
Computer Occupations, All Other l	19,780	15,643	-20.9%
Retail Salespersons	19,145	21,906	14.4%

Source: Burning Glass Technologies

**TABLE 3A - LONGITUDINAL EMPLOYER-HOUSEHOLD DYNAMICS DATA FOR AREAS ADJACENT AND AROUND THE SALTON SEA**

Salton Sea	Salton Sea		Other Imperial County		Other Riverside County		San Diego County	
	Workers	Resi-dents	Workers	Resi-dents	Workers	Residents	Workers	Residents
Accommoda-tion and Food Services	1,462	4,355	4,020	5,039	92,726	105,522	170,683	167,652
Administrative and Support and Waste Management and Remediation Services	308	2,327	1,583	2,615	52,182	66,985	92,713	95,737
Agriculture, Forestry, Fishing and Hunting	8,741	6,446	8,808	9,284	5,688	14,682	9,614	12,237
Arts, Enter-tainment, and Recreation	1,256	1,413	110	581	15,529	21,440	37,567	37,460
Construction	<b>1,036</b>	<b>2,414</b>	<b>1,462</b>	<b>2,484</b>	<b>71,469</b>	<b>74,365</b>	<b>87,672</b>	<b>85,430</b>
Educational Services	3,243	2,808	5,036	5,345	73,137	85,092	13,7,949	136,982
Finance and Insurance	123	523	601	858	10,335	20,649	46,255	48,428
Health Care and Social Assistance	3,154	5,125	7,994	8,848	107,169	136,146	206,283	206,175
Information	28	463	213	520	6,514	14,062	24,664	31,418
Management of Compa-nies and Enterprises	56	282	110	348	3,046	10,067	26,983	26,833

Source: Longitudinal Employer-Household Dynamics, 2019

**TABLE 3B - LONGITUDINAL EMPLOYER-HOUSEHOLD DYNAMICS DATA FOR AREAS ADJACENT AND AROUND THE SALTON SEA - CONTINUED**

Salton Sea	Salton Sea		Other Imperial County		Other Riverside County		San Diego County	
	Workers	Residents	Workers	Resi-dents	Workers	Residents	Workers	Residents
Manufacturing	1,648	1,635	978	2,160	44,511	67,966	115,380	113,785
Mining, Quar-rying, and Oil and Gas Extraction	362	113	39	178	416	764	342	526
Other Services [except Public Administra-tion]	346	927	826	1,223	21,446	26,546	51,997	51,147
Professional, Scientific, and Technical Services	305	1,045	773	1,356	22,935	40,436	153,272	148,006
Public Administration	<b>1,936</b>	<b>1,896</b>	<b>4,614</b>	<b>5,029</b>	<b>32,429</b>	<b>42,555</b>	<b>45,896</b>	<b>45,426</b>
Real Estate and Rental and Leasing	175	489	421	620	10,191	14,709	29,590	29,610
Retail Trade	<b>1,444</b>	<b>3,974</b>	<b>4,997</b>	<b>6,233</b>	<b>82,037</b>	<b>96,719</b>	<b>130,556</b>	<b>134,808</b>
Transpor-tation and Warehousing	428	1,026	1,706	2,099	48,520	53,601	29,833	38,536
Utilities	1,121	529	1,292	1,110	3,615	6,438	6,461	6,299
Wholesale Trade	940	1,170	1,377	1,793	26,156	40,784	46,879	51,084
<b>Total</b>	<b>28,112</b>	<b>38,960</b>	<b>46,960</b>	<b>57,723</b>	<b>730,051</b>	<b>939,528</b>	<b>1,450,589</b>	<b>1,467,579</b>

Source: Longitudinal Employer-Household Dynamics, 2019

should be included as was realistically feasible within a COVID environment.

## QUALITATIVE ANALYSIS

As part of the qualitative analysis, we sought to gain perspectives on what inclusive economic development and shared governance could look like directly from the community themselves. We also worked to ground-truth the proposed inclusive economy indicator framework proposed by the UCSC team (Figure 1 above), to better understand the differences between what the literature indicated as possibilities and what those from the Salton Sea region either experienced or have observed. In particular, we sought to understand what the possibilities were for the type of inclusive economic framework proposed in UCSC's work, which focused on the role of collaboration and inclusivity in creating equitable systems. This meant outreach to government officials, policymakers, business leaders, community organizations, and the area's youth, to understand their thoughts on what inclusion could mean and what it might look like in practice. It also meant understanding their perspective on current processes and the opportunities to push the needle toward greater inclusion and ultimately shared governance over ideation, decision-making, and ultimately implementation.

Methods for the qualitative data analysis included conducting interviews and community listening sessions/focus groups. To better understand both current and future economic and workforce development in the Salton Sea region, our center conducted in depth interviews with 6 government officials and business leaders in Coachella Valley and Imperial County. The informant/elite interviews were conducted in English over zoom with government/business stakeholders and grassroots organization leaders, and typically lasted for about 30 minutes. Our conversations with the interviewees centered around the landscape of economic and workforce development in the region, and the different effects that development could have on local communities. We also held community listening sessions/focus groups in order to better understand broader community perspectives on inclusive economic development generally, and specifically to understand the community's concerns and hopes for future economic development in the region. The focus groups were conducted in both Spanish and English over Zoom, and included the area's youth and several community leaders.

In general, the major takeaways focused on issues around the current policy and development process, the overwhelming dominance of agriculture and the service industry, potential health impacts from any

new development, who new jobs would go to, concerns about the reality of lithium and lithium-extraction-adjacent development, the need for more infrastructure including educational investment and support (higher education but also more generally) and the potential for small business development. While it seemed that there was appetite for more inclusive processes, there was also a lot of hesitation as a result of historical policies and practices that had effectively excluded many of the most vulnerable from receiving any potential benefits of development.

The following sections detail the major themes that emerged from the session, with a concluding section that bullets out several general categories of findings.

## HOW COVID-19 CHANGED DYNAMICS

In general, the major industries in the Salton Sea region are hospitality, agriculture, healthcare and health-care related industries and related other industries. Typically these are low paying jobs that do not necessarily offer benefits nor regular hours.

Among other things, the COVID-19 pandemic changed how many both defined as well as viewed "essential workers". Healthcare/healthcare-adjacent and food production-related workers were thrust into the spotlight as the pandemic was a unique type of system shock where public health officials promoted social distancing as a way to curb the spread of the virus. For many (and predominantly white collar workers), this meant transitioning to a remote work environment. However, jobs such as those in healthcare and health-care-adjacent industries were not able to transition to a remote setting, similar to jobs in food production settings like agriculture. Additionally, many of the agricultural workers reside in crowded living conditions, where it is next to impossible to follow the CDC's social distancing requirements.

**"The pandemic may have actually been helpful in that it elevated the role of essential workers" - Community organization**

With all of this in mind, the fact that the COVID-19 pandemic highlighted the plight of farmworkers as well as their crucial role in keeping the food supply chain afloat was not lost on community members. Whereas many often do not think about where the food in stores and restaurants comes from, the pandemic's focus on supply chain issues - including the entire food supply chain - was in many ways a wakeup call. And for many this wakeup call was long overdue - farmworker labor

accounts for such a significant portion of California's agricultural output, that while it was unfortunate that it took a global pandemic to shine a bright light on the role farmworkers and agricultural workers generally play in getting food to people's table, in certain ways it was a welcome spotlight.

## IMPORTANCE OF DIVERSIFICATION

Diversification is important, and even more so for smaller-scale economies like the Salton Sea region. While focus group participants and interviewees talked about the large role of agriculture, hospitality, and healthcare in the region's economy, there was also talk about the potential role of small businesses. This was particularly true in the focus group session that involved area youth, indicating that there is an appetite to do things a little differently than in the past.

**"We are all for diversifying the economy, it would change the types of opportunities available for the entire Valley, we just want to make sure we get what is promised, that it is done in a way that benefits the region."**

**- Government official**

Additionally, there were concerns about the types of developments that are approved for the region, and about who the jobs would ultimately go to. For instance, there were several concerns raised about the development process itself, and how policymaking actually occurs. While ideally these processes are inclusive and incorporate community voices and address concerns raised, there is skepticism about how inclusive things actually are versus what is said and/or advertised. Additionally, there was a feeling that several recent developments had been approved without community input or an understanding of what local needs and wants are.

**"We understand that we need to diversify... we want to be able to hold on to what we have, but we also want to be able to provide opportunities for our kids, to provide them local opportunities" - Government official**

Similarly, government officials also signaled skepticism about the actual impacts of various developments. For instance, it seemed like in various projects that there were many promises about the amount of jobs that would be created and about the amount of tax revenue

that the county would see. However, the eventual reality was that these benefits did not materialize locally, and instead often went to other regions. There was also voiced concern about future opportunities for youth. One government official mentioned that they wanted to be able to see the region offer future opportunities for their children and the region's children generally. They wanted the youth to be able to feel like they had a choice - whether to leave for other regions, or feel like they could stay (or return) and still find enticing opportunities locally.

## NEED TO INVEST IN A TRANSFORMATIVE WAY

In many ways, part of the exercise of conceptualizing what inclusive economic development could be involves thinking about how to break away from the status quo. While part of the discussion inevitably touched on the potential for some sort of investment in lithium extraction or lithium-related economic generators, a major concern raised was the ability of the region's residents to be eligible - and ideally ultimately competitive - for potential new job openings from any type of economic development investment. While some were fairly optimistic about what a major economic development investment like lithium related activities could mean for the region, there was also a heavy degree of hesitation and also skepticism about what it would end up looking like in practice.

**"We need invest in education now. I'm talking about in today's kindergarteners."**

**- Government official**

One government official mentioned that a major part of the issue was the educational level of the region, compared to the surrounding areas. Basically, there aren't enough local workers who are skilled at that level to be able to fill job openings, meaning that realistically offers and positions would go outside the region. Similarly, if the region wants to envision a future in which local workers can fill these positions, there needs to be a concerted effort to invest in education now, and at the most basic levels. Meaning, not just at the high school level; the region needs to invest in today's kindergarteners. Yes, that would mean that the rewards would be reaped later on, but the main gist was that if we don't invest now, we will not be able to establish the foundation needed to create a strong pipeline of youth who will be eligible and prepared to apply for and be competitive for these future jobs. Importantly, educational attainment has a strong link to one's ability for a higher earning potential, and investing in education early on



**FIGURE 4 - LEHD ANALYSIS DONE BY CENSUS COUNTY DIVISION (CCD)**



Source: LEHD 2019



Source: LEHD 2019

in a student's life can help provide a strong foundation and start towards a range of career options later on in life. Similarly, job training pipelines and support networks can help create opportunities for local residents. Similar to the educational investments, these networks of training and support need to be established soon so that pipelines of training opportunities can become fully integrated into the employment ecosystem.

**"[These investments] are going to happen one way or another; we understand that they can be transformative but we also want to make sure they happen in the right way, that benefits will extend to all."**

**- Community organization**

Additionally, thinking outside of the region's traditional economic "box" can help provide new and exciting opportunities for the region's youth. Several interviewees commented that youth who go away for school or other types of training often return with nowhere to put their skills to use. Or they return with some initial skills, but would be more competitive if they were able to get additional training.

In many ways, the focus group participants and the interviewees were more cautiously optimistic than pessimistic about the region's situation. By mentioning youth who leave but want to return and wishing for more professional opportunities in the region, participants' responses illustrated that there is local talent to be tapped, it is more of how and in what ways to do so. Additionally, there was a general understanding that change was needed. Several interviewees talked extensively about understanding the role of diversification, and that there are definitely opportunities on the table that could be transformative for the region. The question was how to make sure that anything that came in could be beneficial for the region as a whole.

**NEED TO MAKE DEALS (E.G., CBA) MORE INCLUSIVE, EFFECTIVE**

One issue that was brought up in both the interviews and focus groups was how to bring in investment that brought gains to as many members of the community as possible. In some situations, deals such as Community Benefit Agreements (CBAs) are made, which are supposed to provide some sort of community-specific guarantee, often in exchange for some sort of community-related offer such as formal project support. However, these agreements do not always work out in practice, with benefits often going to certain individuals

and/or groups. Additionally, things like equity of treatment, pay, benefits, and social support are not always equally spread amongst various groups or even individuals/employees. Any agreements or deals need to be made in a way that is more inclusive. If they are more inclusive, they are more likely to actually be effective in garnering support for projects and proposals.

**"We've had bad experiences with CBAs (community benefit agreements) in the past, because the benefits only went to certain people/groups." - Community organization**

**NEED FOR REGIONAL COOPERATION**

Cooperation is important for any endeavor, and more so for ones that are intended to be new and transformational. In many ways, several of the barriers to bringing in new opportunities to the region boiled down to needing greater regional cooperation. For instance, one of the larger issues discussed was the need for infrastructure of all types. This would extend to the types of infrastructure needed to support a brand new industry, but also the type of "soft" infrastructure that would help support small business development startup, growth, and sustainability.

**"[The region's stakeholders] really need to cooperate in order to solve [the region's] issues." - Business leader**

In terms of major new industries such as the potential for lithium extraction and/or lithium-related businesses, basic infrastructure like roads and broadband were mentioned. However, general infrastructure improvements like more stable electricity came up in terms of general need, including infrastructure that would support housing.

Additionally, a major caveat mentioned was that no major economic change was going to happen overnight. This was an interesting comment, as it seemed like a lot of the narrative swirling around regarding talk of transformative economic development (like the potential for lithium extraction) was that it would bring major changes quickly. The participant's observation that change would not be fast was important, as the implication was that the community as a whole needs to come together now, and be in it for the long haul, in order for any major transformational change to actually be realized. Fractional, temporary support will not bring about major transformational change, and certainly not the type of

**TABLE 4 - EMPLOYMENT IN COMMON MINING OCCUPATIONS, EL CENTRO METRO, 2020**

Employment in Common Mining Occupations (El Centro Metro, 2020)	
Occupation	Workers
Continuous Mining Machine Operators	0
Operating Engineers and Other Construction Equipment Operators.	160
Excavating and Loading Machine and Dragline Operators, Surface Mining	>100
Industrial Machinery Mechanics	80
Heavy and Tractor-Trailer Truck Drivers	<b>860</b>
First-Line Supervisors of Construction Trades and Extraction Workers	<b>120</b>
Maintenance Workers, Machinery	0
Plant and System Operators, All Other	0
General and Operations Managers	<b>610</b>
Mobile Heavy Equipment Mechanics, Except Engines	<b>100</b>

Source: [https://www.bls.gov/oes/current/oes\\_20940.htm#47-0000](https://www.bls.gov/oes/current/oes_20940.htm#47-0000)

**TABLE 5 - EMPLOYMENT IN OCCUPATIONAL GROUPS RELATED TO MINING, EL CENTRO METRO, 2020**

Occupational Group	Number of Workers	% of total Employment
Construction and Extraction Occupations	1,320	2.3%*
Installation, Maintenance, and Repair Occupations	2,090	3.6%
Production Occupations	1,880	3.3%*
Transportation and Material Moving	4,020	7.0%*

Source: [https://www.bls.gov/oes/current/oes\\_20940.htm#47-0000](https://www.bls.gov/oes/current/oes_20940.htm#47-0000) & [https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages\\_elcentro.htm](https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_elcentro.htm)

Notes: \* The mean hourly wage or percent share of employment is significantly different from the national average of all areas at the 90-percent confidence level.

**TABLE 6 - TOP TOTAL EMPLOYMENT CATEGORIES BY METRO**

El Centro Metro			Riverside Metro			San Diego Metro		
% of Emp.	Category	Mean Hourly Wage	% of Emp.	Category	Mean Hourly Wage	% of Emp.	Category	Mean Hourly Wage
11.4%	Office and administrative support	\$19.48	15%	Transportation and material moving	\$19.11	12.0%	Office and administrative support	\$22.44
10.9%	Farming, fishing, and forestry	\$15.66	11.9%	Office and administrative support	\$21.10	9.8%	Sales and related	\$23.27
9.8%	Healthcare support	\$14.91	9.1%	Sales and related	\$20.61	9.1%	Food preparation and serving related	\$15.80
9.7%	Sales and related	\$18.04	9.0%	Food preparation and serving related	\$14.98	7.2%	Business and financial operations	\$39.74

Sources:

El Centro: [https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages\\_elcentro.htm](https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_elcentro.htm)

Riverside: [https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages\\_riverside.htm](https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_riverside.htm)

San Diego: [https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages\\_sandiego.htm](https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_sandiego.htm)



change that would be expected out of a major economic development investment.

**GENERAL TAKEAWAYS: INSTITUTIONAL PERSPECTIVES (GOVERNMENT, BUSINESS)**

- **Current Employment Opportunities:** The policymakers interviewed identified hospitality, agriculture, and related industries (e.g., packing and canning), and to some degree healthcare and healthcare-adjacent industries as the predominant sources of employment in the region. While there was some talk of small businesses, it was mostly references to interest in building up a small business ecosystem. Most of the discussion about small businesses occurred with community members and was referenced in the listening session, though even there primarily in the session with the youth.
- **Barriers Greater Employment Opportunities:** One of the biggest barriers policymakers and business leaders mentioned was infrastructure. While potential industries such as lithium extraction and battery manufacturing have the potential to significantly change the economic landscape, several mentioned that this wasn't going to happen overnight, counter to what the interviewees felt was a general narrative that this will change things quickly.
- **What is Needed to Overcome Barriers:** Educational investments and opportunities were highlighted as necessary to help build up the type of workforce that can access higher-paying jobs related to a potential lithium industry. But even then there was caution that these educational investments needed to happen now, and that the community wouldn't really see the impacts for several decades. Also, there was concern that there would be no guarantee that the current local community would be able to directly benefit from the creation of higher-paying jobs related to lithium extraction and battery manufacturing, which again highlighted the need for education and training.
- **Issues with Available Opportunities:** Several respondents also noted that young people leave because of a lack of opportunities. And for those that do return, they often cannot fully utilize their education and training when they are back "home" because there aren't enough jobs in those professions, or there aren't any training opportunities to help them better position themselves to be competitive for the few professional jobs that do exist in the region.
- **Concerns about Development Impacts:** Another concern was health impacts of any development, and

whether or not economic development initiatives are ultimately extractive, and wouldn't actually benefit the local community. Respondents mentioned that there were a fair amount of developments in the past that were advertised as job creators, except the jobs and the tax revenue all went elsewhere. Additionally, even current developments are still geared towards bringing in people from outside the community; several of the government officials and policymakers interviewed acknowledged that the community was not very engaged in the process and that the interests of a select few motivated actions of the decision-making bodies. This was a sentiment shared by the community leaders interviewed.

- **Suggestions for Opportunities & Related Caveats:** The suggestions for opportunities were fairly mixed. While there was talk about the potential for lithium extraction to be beneficial, there was more discussion about battery-adjacent industries and how that might be a better alternative to battery manufacturing. This was partially because of the realization that manufacturing is still going to be a heavy industry and wouldn't visually be all that "attractive", but also because there was a lot of concern that others from outside the region would be the only ones qualified for the job openings, and that they would simply commute in because the region just isn't that attractive as a place to live. Therefore battery-adjacent industries seemed to be viewed as an option that might provide an opportunity for local residents to gain employment and ideally a foothold into higher-paying industries.

**GENERAL TAKEAWAYS: COMMUNITY PERSPECTIVES**

The interviews with community leaders tended to focus on current employment opportunities/lack of opportunities, barriers to community engagement and suggestions for improvement, and what employment opportunities could be most beneficial and desired by current residents.

- **Current Employment Opportunities:** The current landscape is primarily agricultural-focused, with some hospitality. There was some talk about small businesses, but the focus tended to be on farm-workers and to a lesser degree hospitality jobs. The youth in the focus groups talked a lot more about small businesses, and also about opportunities they felt were related to small business start-up and growth.
- **Concerns about New Developments:** Many of the concerns were around health, with some also

**TABLE 7 - MEAN HOURLY WAGES FOR EMPLOYMENT CATEGORIES RELATED (DIRECTLY AND TANGENTIALLY) TO EXTRACTION AND EXTRACTION-RELATED INDUSTRIES**

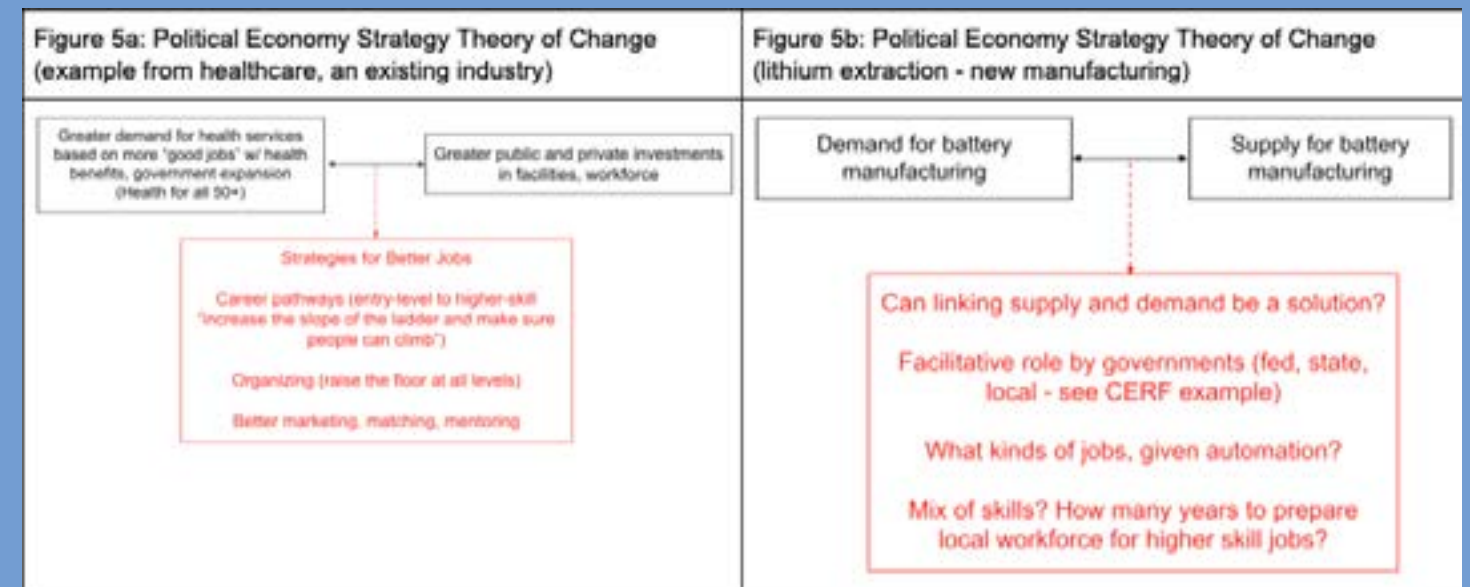
	El Centro Metro	Riverside Metro	San Diego Metro
Management	\$49.78*	\$56.03*	\$67.19*
Business and Financial Operations	\$34.23*	\$35.16*	\$39.74*
Architecture and Engineering	\$38.66*	\$43.28	\$46.71*
Construction and extraction	\$27.82*	\$27.38*	\$29.02*
Installation, maintenance, and repair	\$25.68	\$26.40*	\$27.55*
Production	\$21.42	\$19.72*	\$21.79*
Transportation and material moving	\$18.86	\$19.11	\$19.96*

Notes: \* The mean hourly wage or percent share of employment is significantly different from the national average of all areas at the 90-percent confidence level.

Source:

El Centro: [https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages\\_elcentro.htm](https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_elcentro.htm)  
 Riverside: [https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages\\_riverside.htm](https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_riverside.htm)  
 San Diego: [https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages\\_sandiego.htm](https://www.bls.gov/regions/west/news-release/occupationalemploymentandwages_sandiego.htm)

**FIGURE 5 - TWO EXAMPLES OF CHANGE THEORIES; A: EXISTING INDUSTRY, B: NEW INDUSTRY**



**TABLE 8 - NATIONAL OCCUPATIONAL PROJECTIONS, 2020-30,  
AND WORKER CHARACTERISTICS, 2020 (IN THOUSANDS)**

2020 National Employment Matrix title	Emp, 2020	Emp, 2030	Pct change, 2020-30	Openings, 2020-30 ann avg	Median annual wage, 2020	Education	Experience	Training
<b>Total, all occupations</b>	153,533.80	165,413.70	7.7	18,474.40	\$41,950	—	—	—
<b>Construction and extraction occupations</b>	6,971.10	7,371.20	5.7	741.4	\$48,610	—	—	—
<b>Extraction workers</b>	225.9	264	16.9	32.5	\$46,020	—	—	—
Excavating and loading machine and dragline operators, surface mining	41.3	43.1	4.5	5.1	\$45,150	High school diploma or equivalent	Less than 5 years	Moderate-term on-the-job training
Continuous mining machine operators	15.2	16.1	5.7	1.9	\$56,920	No formal educational credential	None	Moderate-term on-the-job training
Roof bolters, mining	2.1	1.9	-6.9	0.2	\$61,190	High school diploma or equivalent	None	Moderate-term on-the-job training
Loading and moving machine operators, underground mining	3.5	3.3	-5.5	0.4	\$56,640	No formal educational credential	None	Short-term on-the-job training
Rock splitters, quarry	4.6	4.9	6	0.6	\$37,130	No formal educational credential	None	Short-term on-the-job training
Roustabouts, oil and gas	43.5	56.4	29.5	7.2	\$39,420	No formal educational credential	None	Moderate-term on-the-job training
Helpers--extraction workers	12.6	15.5	23	1.9	\$37,860	High school diploma or equivalent	None	Moderate-term on-the-job training
Earth drillers, except oil and gas; and explosives workers, ordnance handling experts, and blasters	23.2	25.1	8	3	\$48,510	High school diploma or equivalent	Less than 5 years	Long-term on-the-job training
Underground mining machine operators and extraction workers, all other	12.6	13.9	10.2	1.7	\$52,400	High school diploma or equivalent	None	Moderate-term on-the-job training

Source: <https://www.bls.gov/emp/tables/occupational-projections-and-characteristics.htm>

voicing concerns about who the new jobs would go to – local residents or those from outside the area.

- **Concerns about the Development Process:** In terms of process, there were several concerns raised about the development process and how policymaking occurs, significant doubt about how inclusive things actually are (versus what is advertised and/or said), and the feeling that several recent developments had effectively been approved but seemingly without any community input or understanding of what the local needs and wants are. In the youth focus group there was talk about how there are clear, visible differences between the more and less affluent neighborhoods.
- **Concerns about Equity of Treatment/Pay, Benefits, Support:** The community focus group touched on concerns about equity of equal pay for equal work (e.g., gender differences in pay), benefits, and time off from work.
- **Differences Between Developments that Get Approved and Community Needs/Desires:** Some of the interviewees discussed infrastructure, and talked about the community's desire for basic needs like affordable housing (specific mention about trailer park improvements).
- **Realities about Opportunities & Impact on Youth:** Similar to some of the government interviewees, there were questions about realistic job opportunities for youth, either for those who stay or for those who go away for school (or for other reasons) but then want to come back.
- **Role of COVID Pandemic on Highlighting Role of Essential Workers:** One interviewee brought up that in a way COVID may have been helpful because it highlighted the importance of 'essential workers', and expressed hope that this awareness would continue past the pandemic.
- **Potential for New Opportunities:** There were a few mentions of healthcare and health-care related opportunities, and some talk about support for mental health; some similar talk about science-related opportunities. There were several mentions about small businesses, and there seems to be a fair amount of optimism about the promise of small business ownership and that there is a lot of untapped potential and skills that could be harnessed through small business development.

## OVERALL QUALITATIVE IMPRESSIONS

In many ways, the feedback from the community mimicked the concerns expressed by policymakers and government officials. Both groups were concerned about who would ultimately benefit from any regional investment. Both groups indicated willingness to explore new opportunities, and were anxious to see realistic options for the area's youth. Both groups understood the need to do better for the region as a whole.

These observations provide several opportunities for inclusive investment in the region. The general appetite for options, and thus to an extent change, signals an understanding that in order to be resilient and sustainable, any potentially transformative investments need group consensus as well as collaborative efforts to ensure that benefits are spread out (as opposed to simply benefitting one group). However, the concerns raised about how development decisions have occurred in the past does suggest a need for change in how business is done. Incorporating more voices at the table from as early as possible, providing adequate information early on, and creating processes that are as inclusive as possible can help mitigate some opposition to new proposals and can help achieve greater consensus and satisfaction with outcomes.

Revisiting the proposed inclusive economy indicator framework, all five broad indicators (i.e., equity, inclusion, growth/stability, sociological health, and access to opportunity) were touched upon in some form in the interviews and the focus groups.

## QUANTITATIVE ANALYSIS

We explored several avenues to better understand the current economic and employment landscape in Riverside, San Diego, and Imperial counties, as well as understand the socio-economic makeup of the populations from these counties. Because the aim was to better understand opportunities and obstacles to inclusive economic development, and in effect ground-truth the potential for inclusive economic development within the region as it might align with the frameworks proposed by the UCSC team, it was important to as fully as possible understand the supply-demand dynamic within the area immediately adjacent to the Salton Sea, as well as surrounding regions that are within the Salton Sea's potential area of influence. It should be noted that for the most part, the analysis did not place heavy emphasis on travel time; while typically there would be tiers of travel time (e.g., 30 minute drive, 45 minute drive, 60 minute drive, >60 minute drive) to compare, both the geography that surrounds the immediate Salton Sea job-shed (e.g., the Sea is directly surrounded by deserts on two sides, and there are limited road access points) and the traveling characteristics of southern California



residents (e.g., many commute long distances, and do not live close to where they work) prompted us to focus primarily on the potential of matching supply of workers with demand for skills and labor.

Our analysis utilized publicly available data from the US Census, Bureau of Labor Statistics, as well as proprietary data from Burning Glass Technologies. As a caveat, the Burning Glass database pulls job opening data from postings that are publicly listed online. This is important to note because the types of jobs that are posted online tend to be higher paid and also require a bachelor's degree. While this does mean that this analysis likely is missing jobs that are primarily advertised and recruited via personal networks and word-of-mouth, it still serves as an important window into the types of job universes that would likely come with investment in lithium extraction and lithium extraction-related industries.

### EMPLOYMENT SITUATION IN THE IMMEDIATE SALTON SEA REGION, AND ADJACENT GEOGRAPHIES

Job openings in the Salton Sea region mirror those of Southern California as a whole, with substantial numbers of openings in healthcare, retail, and technology occupations. In particular there is an enormous unmet demand for nurses in the region, with more than 7.5 percent of all job openings in the data being for registered nurses in 2019, and 6.3% in 2021.

If we look at the industrial breakdown of the openings in 2019, it is clear that the driving forces in the local economy are Health Care, Accommodation and Food Services, and Retail Trade, with the remaining new job opportunities spread relatively evenly throughout the other industries. If we then compare these to the neighboring economies of Riverside and San Diego Counties, it becomes clear that the Salton Sea region is significantly more dependent on local population serving industries than their neighbors, with comparatively more openings in health care and food services, and many fewer openings in professional services and manufacturing. This suggests that the region is missing the types of major industry clusters that help to anchor a local economy, and may be more at risk to broader economic fluctuations.

These openings numbers align with the overall industrial employment picture in the region, with the most employment being found in the same three industries. In fact, roughly 50 percent of the total workforce in the region is employed in one of these industries. However, current employment levels show a higher number of Accommodation and Food Services workers than Health

Care, suggesting that there is a higher demand for Health Care workers than can currently be met, and that these positions may be harder to fill.

If we compare the share of employment in each of these major industries with the two neighboring counties, we see that, although these are still the largest industries overall for all three regions, the Salton Sea region is significantly more dependent on Accommodation & Food Services as well as Health Care than the neighboring regions are, with more than a third of all local employment being in these two industries.

This bifurcation between employment opportunities in the Salton Sea and neighboring regions can similarly be seen if we look at the most in demand occupations. Both the local Salton Sea region as well as Riverside & San Diego have heavy demand for Registered Nurses, but there is substantially more demand for technical occupations such as software developers in San Diego and Riverside.

The earnings potential for these most in demand occupations varies greatly. Registered nurses have relatively similar, and high, salaries across all three regions, but software developers have much higher salaries in San Diego County, where they are in high demand, than in the Salton Sea region. In contrast, retail salespersons are relatively more in demand in the Salton Sea region, but these jobs have significantly lower earnings potential than the other in demand occupations and show the difference in availability of "good jobs" across the region.

This lack of high earning jobs is readily apparent if we compare the share of workers and jobs in the region earning more than 40 thousand dollars a year, as a baseline level of job quality. It is clear by this metric that the majority of workers in the Salton Sea region are earning significantly less than their counterparts in the bordering counties. Of even more concern is the gap between local jobs which pay more than this, and residents who earn it. The fact that more residents earn above this level than there are jobs that pay above this level shows that for many workers in the region, it is necessary to commute outside the local labor market in order to secure a job that pays a decent wage. Of course, there is more to a good job than simply the raw income potential, but the shortage of jobs with reasonable wages is a major concern for growth and economic equity in the region.

Another important measure of the quality of local jobs are the number which offer full time, dependable schedules as well as the education required for such a job. In each region, the share of total openings that

are full time are between 40 and 50 percent of total job openings, with the 48 percent of openings being full time in the Salton Sea region and roughly 40 percent of openings being full time in San Diego County. Similarly in all regions, roughly half of job openings have no associated educational requirement, however there is a sharp difference between the Salton Sea and Riverside County regions, and San Diego County when it comes to higher education requirements. More than twice as many job openings in San Diego County requested a college degree as in either of the other regions, which mirrors the general understanding of the local economies. San Diego County benefits immensely from a high tech focus on biosciences and defense, as well as professional services which means that there are many more opportunities for those with college degrees or higher to find suitable employment. In contrast the Salton Sea region has a dearth of suitable opportunities for educated workers outside of healthcare, meaning that educated workers may be forced to either commute or relocate to find suitable opportunities.

The education levels of the regional workforces mirror this understanding, with San Diego County having nearly a third of workers with a university education, in contrast to only 19 percent by the Salton Sea. In spite of the larger supply of college-educated workers, San Diego still has more opportunities available to them as roughly a third of all job opportunities request a bachelor's degree or higher. In the Salton region, only 17 percent of job openings request a bachelor's degree or more, meaning that some educated workers will not be able to find employment opportunities that take advantage of their education level.

This lack of local economic opportunity - largely characterized by lower earnings, fewer hours, lack of opportunities for those with higher educational credentials - may be seen in the commuting patterns present in the region. If we look at the flow of commuters from the Salton Sea region to the various local and neighboring counties, we see a substantial loss of workers, with relatively high numbers commuting to San Diego County in particular, and similarly large numbers commuting to Riverside County and Los Angeles County.

Although the LEHD data does not explicitly tell us which industries people are leaving the region to work in, we can approximate this by comparing the number of local jobs in each industry with the number of residents who are employed in each industry. If we do so, we see that for the Salton Sea region, every sector has more workers than jobs, meaning that in every industry there are not enough opportunities locally to employ the resident workforce. Even the largest local drivers of employment, like Accommodation & Food Services, Retail

Trade and Healthcare have 10 percent or more local workers than jobs. In contrast, the ratio of local jobs to local workers is roughly 1 to 1 for San Diego County, meaning that there is sufficient local economic opportunity to employ the residents of the county. Importantly, only looking at the largest sectors by employment understates the gap, as many of the smaller industries locally have fully half of their workers or more commuting to a different county to find work.

This lack of local economic opportunity, in spite the qualifications of the local workforce, is a dramatic impediment to future economic growth in the region and furthers the gap between those living in high opportunity regions and those not.

One potential economic development project ongoing in the region is the possibility of direct lithium extraction. According to the National Renewable Energy Laboratory (NREL), direct lithium extraction in the region could be done with one-time capital expenditures of \$50 million, and annual operating expenditures of around \$77 million. Given that Imperial County, the closest proxy for the region as a whole, had a gross county product (GCP) of only about \$9 billion in 2019, this level of annual expenditure would be equivalent to a nearly 1 percent increase in GCP locally. If this project were to move forward, there is some question as to whether the economic benefits and jobs would accrue locally, or whether resources would be extracted in exchange for little return to local communities.

Recalling the local jobs to workers ratio, we see that at least three quarters of local workers employed in the mining sector commute to another county to work, so there are at least some workers who would be prepared to shift to local employment if opportunities were opened up.

### EMPLOYMENT IN COMMON MINING OCCUPATIONS, EL CENTRO METRO, 2020

Looking specifically at the most common occupations for mining, we see that there are relatively few workers currently employed in these specific occupations. However, a large part of this can be attributed to the lack of local employment opportunities, meaning that workers are not employed locally in these fields. If we look at the more expansive classes of occupations, we see that there are a number of workers available in adjacent fields to draw from to fill positions.

### EMPLOYMENT IN OCCUPATIONAL GROUPS RELATED TO MINING - EL CENTRO METRO, 2020



In particular, as we previously noted, the majority of local workers who are employed in primary production, such as mining and manufacturing are forced to commute outside the region for employment. So, there should be a substantial pool of workers who are willing to work locally, assuming that wages are reasonably comparable.

### TOP FOUR EMPLOYMENT CATEGORIES BY METROPOLITAN AREA

In the El Centro metropolitan area, the largest occupational category by employment is office and administrative, followed by farming, fishing, and forestry, and then by healthcare support, and sales and related. This generally aligns with the data collected via interviews, though notably the interviews and focus group participants did not mention office and administrative support as much as farming, healthcare, and service sector industries.

In the Riverside metropolitan area, the largest occupational category is transportation and material moving, followed by office and administrative support, sales and related, and finally food preparation and serving related. Considering the overwhelming prevalence of warehousing in Riverside County, it follows that the largest proportion of employment is in transportation. Additionally, the presence of UC Riverside in the county may account for the significant share of office and administrative support.

For the San Diego metropolitan area, office and administrative support is the largest occupational category, followed by sales and related, food preparation and serving related, and business and financial operations. Considering that San Diego is a major West Coast tourist destination, it follows that the higher percentages of workers are in hospitality related industries.

In this particular analysis, employment categories that could reasonably be attributed to extraction and extraction-related industries were included - so this means jobs like management positions, business and finance, and various types of engineering expertise. Identified employment categories that are more directly related, but not specifically categorized as extraction, included installation, maintenance, and repair; production; and transportation and material moving. Across all three metropolitan areas, the hourly wages for employment categories that are more heavily focused on white collar-jobs are higher than those of the blue-collar ones. And across all three metropolitan areas, the hourly difference in wages is at least \$6 dollars between the lowest paid white collar job (business and financial operations) and the highest paid blue collar job (con-

struction and extraction), which can mean a difference of at least approximately \$12,500 a year (assuming steady full time hours).

### NATIONWIDE OCCUPATIONAL PROJECTIONS, INCLUDING EDUCATION, EXPERIENCE, AND TRAINING DETAILS

Nationwide data from the Bureau of Labor Statistics for Occupational Projections, 2020-30, focusing on "Construction and extraction occupations" indicates that in most cases, the highest education level required is a high school diploma or equivalent, in most cases there is either no prior or less than 5 years of experience required in a related field, and typically there is only moderate on-the-job training needed to gain competence, with only "earth drillers, except oil and gas; and explosives workers, ordnance handling experts, and blasters" requiring long-term on-the-job training. While this may mean that there are low barriers to entry, as the prior section suggests, these occupations in the areas of consideration tend to come with lower wages.

### OCCUPATIONAL EMPLOYMENT AND WAGE ESTIMATES

A comparison of the May 2020 Metropolitan and Non-metropolitan Area Occupational Employment and Wage Estimates for the non-MSA areas of Nevada against those for El Centro, CA revealed that there were several job categories that were in the non-MSA Nevada list that did not appear in the El Centro list. Non-Metropolitan Nevada was specifically chosen as a comparison because it is home to Silver Peak, a lithium mine (Silver Peak, NV, is located near a dry lake bed). While we cannot be sure that these jobs are specifically attributed to the lithium mine (there are other mining operations in the area; lithium is just one mineral that is being extracted), it does lend some potentially important points of comparison regarding the types of jobs that could come with economic investment like lithium extraction.

In the management and business and financial categories the jobs were similar across both areas. However, under Architecture and Engineering Occupations, non-Metropolitan Nevada had far more engineering occupations listed. Additionally, non-Metropolitan Nevada had a relevant listing - Geoscientists, except Hydrologists and Geographers - under Life, Physical, and Social Science occupations.

In general, the mean annual wages for these occupations in non-Metropolitan areas of Nevada ranged from \$52,060 (environmental engineering technologists and technicians) to \$103,060 (mechanical engineers). Geoscientists, except Hydrologists and Geographers -

which was categorized under Life, Physical, and Social Science occupations, a category that did not exist on the El Centro list - had a mean annual wage of \$94,000.

In tables 9 and 10 the rows that are highlighted in yellow are (sub-)employment categories that cross both geographic areas (with the white being the overall parent categories). The rows highlighted in orange indicate the entries in non-Metropolitan Nevada's list that do not also appear in El Centro Metropolitan area's list.

### POLITICAL ECONOMY ANALYSIS

As part of the overall analysis a political economy model was explored to better understand the potential for a particular economic development intervention to create a better supply and demand balance. In Figure 5a, the existing healthcare industry is used as a case study in order to better understand the impact of an intervention (in this case better jobs) on supply and demand for health services jobs. The overall theory of change here is that by creating better career pathways, by better organizing, and by better matching and mentoring the market can better match an increased demand for "good" healthcare service jobs with via greater supply through structural investments. In Figure 5b, lithium extraction is introduced as a new industry entrant. In this case, the theory of change hypothesizes that we can better link battery manufacturing supply and demand by understanding opportunities to expand and improve upon current economic and employment structures and have a workforce that is nimble enough to adapt to changing environments and circumstances.

In large part, one of the larger issues highlighted by this political economy analysis is the ability to actually link supply and demand within the context of current educational levels versus where they would need to be, and how adaptable and resilient the current employment pool actually is, particularly considering that a substantial set of jobs that currently exist in the region could be automated in the future. Additionally, the potential for non-local residents to be substantially competitive for future lithium or other clean energy type jobs is somewhat of a question mark, particularly if the aim is for local residents to have access to higher paying jobs as they often require a bachelor's degree. Right now, the immediate regions in Imperial County that most likely would be the employee pool for new investments are Imperial, Brawley, and El Centro.

Finally, it is unclear whether lithium extraction and/or lithium-adjacent industries can provide a pareto efficient situation. The adoption of policies that tend to leave more people in society worse off - even though they do not absolutely need to - has more often been

the norm. And to link to another system failure, it is not clear that promises can and will be made to avoid opportunistic behavior.

### DISCUSSION

The combined qualitative and quantitative analysis indicates that there are a few important factors at play in the Salton Sea region.

First, existing economic industries and existing socio-political structures in the Riverside and Imperial county areas play a large role in area residents' perceptions of what is possible in terms of economic development, not to mention what 'inclusive' could actually mean in practice. As one interviewee noted, it is really difficult to understand 'what could be' outside of 'what the current situation is'. Additionally the ideas of 'inclusion' and of 'best' are fairly mixed. For instance, much of the qualitative data indicates that while government agencies and policymakers appear to at least on the surface be inclusive, in reality many residents feel that they are left out of the process, not to mention that most outcomes tend to be geared for specific groups, and not for everyone. In a few instances, interviewees and listening session participants alluded to there being visible, noticeable differences in how groups are treated/ viewed, and that many are left out of the entire process, with even fewer being a consideration at the ideation stage. When asked about what economic development they would like to see, many interviewees talked primarily about basic needs like housing and infrastructure, and spent comparably little time discussing what types of jobs they'd like to see in the region. Additionally, one interviewee talked about how policymakers - who look and talk and act like they are from the area - think they know what is best for the community, but there were real questions about in whose interests are they making decisions? And there were real questions about what the actual outcomes would be.

Second, the region's demographics likely will play a role in the realities of what is possible for the immediate future as well as the long/longer-term future. As one interviewee noted, in order to be able to capitalize on economic development investments that would require a bachelor's degree at minimum, and most likely a graduate degree, educational changes and investments need to happen now, and at the youngest grades. Meaning, kindergarten, and realistically pre-kindergarten. But that also means that investments in these students would not be realized until decades later. Yet, there are possibilities for job creation generally, and jobs with the lowest barriers to entry most likely will go to local residents. The big question is exactly how many jobs will be created.

Currently, the pockets with the highest educational levels (i.e., areas with the lowest percentages of residents who reported at most a high school degree) but also closest to the Salton Sea area are in the Coachella Valley region of Riverside County, central San Diego County, and around the county seat of Imperial County. There are large pockets of areas immediately adjacent to the Salton Sea region that have high concentrations of the population who have at most a high school education. It should be noted that many of these regions are sparsely populated, and many are not very developed in terms of infrastructure (e.g., there is a large desert region to the west of the Salton Sea in San Diego County.) This dispersion of educational attainment leads into the third point.

The realities of lithium extraction and related industries as a potential source of inclusive economic development and thus growth appear to be mixed. To the point above about educational attainment, a simple google map distance analysis shows that the areas in San Diego and Riverside counties which also correspondingly had the highest educational attainment levels were over an hour commute - and sometimes over an hour and a half commute - one-way from the southern shore of the Salton Sea. Realistically, this indicates that any economic development that would result in on-site job openings will likely draw from those who reside in El Centro, Brawley, and Imperial.

Considering the jobs analysis done from Bureau of Labor Statistics employment numbers for the El Centro metropolitan area, there are a fair amount of industries that most likely would show up if lithium extraction were to become a reality, where there are no current employment numbers listed. Granted, this could change if there is investment in lithium extraction and related industries, but it could also become a supply and demand problem in that there may be a demand for individuals with these skills, expertise, and background, but there is no comparable supply of workers available to fill all of these positions. Which then brings the question of who will fill these jobs? Will local residents be not only eligible, but also competitive? And if local residents are not eligible for these positions or are ultimately not competitive applicants, will the region be able to attract the type of applicants needed to fill these positions? As one interviewee noted, there are real infrastructure issues that need to be addressed in order to make the region more attractive to new investments, and those need to be addressed sooner rather than later. Which also echoed input mentioned in the first point, about a pressing need for basic infrastructure (e.g., roads, internet/broadband, cellular signal, electricity), includ-

ing adequate housing (and supportive infrastructure for this housing) for the region's residents.

## OPTIONS & RECOMMENDATIONS

To conduct truly inclusive economic and workforce development in the Salton Sea region, it is essential that community be actively and robustly engaged from the beginning. While there are efforts underway, including mechanisms like Community Benefits Agreements (CBAs), often these efforts lack long-term benefits and may not be strongly enforced. In fact, according to our interviews some community members feel that mechanisms like CBAs are helpful, but ultimately a reaction to development that they have not been included in. Community members want true partnership and input about the development proposed, and in some cases already happening in their communities.

### PUBLIC PRIVATE COMMUNITY PARTNERSHIPS (PPCP)

A Public Private Community Partnership (PPCP) is an operational model that relies on the synergistic relationship between the three parties (public, private, and community) that can be employed to achieve sustainable and equitable development through joint development of a business/service/organization that provides mutual benefits to the parties and maximum benefit to the wider community. These types of partnerships can be used to promote local income enhancement, sustainable livelihoods and participatory development across all sectors and topics.

Important aspects that need to be in place for a successful PPCP include the creation of an enabling environment at the state and local level for promoting partnership between private sector and community for development. This can include institutional mechanisms that work to promote partnerships at the local and state level. Another important consideration is building up the capacities of the local community for effective participation in local economic development facilitated by the private sector.

The High Road Training Partnership (H RTP) in California, is an example of this type of collaboration with labor, government, and the private sector at the table. The H RTP is focused on workforce development, and involves community via labor groups, but generally not directly. In terms of a successful PPCP in the Salton Sea region, community would need to be purposefully and actively engaged in the process directly.

### THE READY TO RISE FRAMEWORK

Employing a standardized framework that could provide greater clarity on "how" to adequately engage commu-

mind, equity and inclusion in economic and workforce development is not merely an option, it is a necessity.

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nity and accountability on the quality of this inclusion would further promote truly inclusive economic and workforce development. The Ready to RISE Framework developed by the Center for Social Innovation at the University of California Riverside has been a result of nearly two years of research and engagement that has enabled community organizations to field-test and refine various concepts and measures. This framework builds on the core notion of "shovel readiness," and adds conceptual precision and measurability to notions of resilience, inclusion, sustainability, and equity that decision-makers often uphold as important priorities but remain vague on the details. This framework will be increasingly important as funds from legislation, tied to President Biden's Build Back Better agenda, filter down to the state level. Any projects or initiatives that receive funding should be not merely "shovel" ready, but "Ready to RISE" utilizing metrics and standards for resilience, inclusion, sustain- ability, and equity. For more details about the Ready to RISE Framework, please download and read our report: [Our Salton Sea: Where Theory Meets Practice on Inclusive Economic Development](#).

The mixed-method findings from this report point to both the need and opportunity for greater inclusive economic and workforce development in the Salton Sea region and surrounding communities. The convergence of increasing investments in "Lithium Valley" and the commitments from state and federal governments to promote inclusive economic recovery, (see the Biden Administration's Build Back Better Regional Challenge (BBBRC) and California's Community Economic Resilience Fund (CERF), have opened a window of opportunity for the region to cement inclusive economic and workforce development as the new standard. Having greater and more robust community inclusion in decision-making means not only inviting in but also listening to, learning from, and respecting the perspectives of experts in local communities and local economies—including residents and workers who have firsthand knowledge of benefits as well as challenges, and barriers as well as solutions. Mechanisms highlighted in this report like Public Private Community Partnerships can be used to do some of this work, and frameworks like Ready to RISE can help ensure accountability and long-term success.

Importantly, greater community inclusion is not only a moral imperative, it is also sound economic policy. There is a plethora of bipartisan research that details the numerous economic benefits of creating a more inclusive economy. Everyone, including historically marginalized and excluded communities, would benefit from greater inclusion and participation. With this in

**TABLE 9 - MAY 2020 METROPOLITAN AND NONMETROPOLITAN AREA OCCUPATIONAL EMPLOYMENT AND WAGE ESTIMATES FOR EL CENTRO, CA**

Occupation	Est Total	Hourly Mean	Ann. Mean	Ann 10th Pctl	Ann. 25th Pctl	Ann. Median	Ann. 75th Pctl	Ann. 90th Pctl
All Occupations	57,410	23.96	49,840	27,070	28,770	35,510	60,680	93,890
Management Occupations	2,330	49.78	103,550	50,250	69,890	99,090	125,770	164,790
Architectural and Engineering Managers	40	62.52	130,050	86,880	112,330	132,340	155,360	173,990
Business and Financial Operations Occupations	2,140	34.23	71,200	37,100	52,650	66,390	89,520	104,790
Cost Estimators	40	34.99	72,770	46,530	56,620	67,250	78,570	127,690
Logisticians	30	29.18	60,700	29,320	33,550	58,580	73,050	115,560
Architecture and Engineering Occupations	320	38.66	80,410	39,150	60,480	80,390	100,030	120,430
Civil Engineers	40	39.69	82,560	43,070	49,340	86,100	100,840	144,590
Engineers, All Other	30	48.84	101,600	86,950	91,920	100,870	110,480	128,810
Surveying and Mapping Technicians	40	23.85	49,600	27,070	27,080	48,600	66,400	81,950
Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	60	35.1	73,000	30,970	61,360	74,750	88,820	102,560
Construction and Extraction Occupations	1,320	27.82	57,860	31,600	39,440	53,960	73,530	91,460
First-Line Supervisors of Construction Trades and Extraction Workers	120	33.45	69,580	41,880	49,630	62,310	85,960	117,590
Operating Engineers and Other Construction Equipment Operators	160	27.30	56,790	38,160	44,950	56,050	68,620	79,590
Electricians	80	32.92	68,470	43,880	49,230	64,170	88,410	100,960
Plumbers, Pipefitters, and Steamfitters	50	29.34	61,030	42,160	48,090	58,850	74,830	85,120
Excavating and Loading Machine and Dragline Operators, Surface Mining	**	31.70	65,940	33,540	41,430	57,580	82,250	121,470

Source: [https://www.bls.gov/oes/current/oes\\_20940.htm#47-0000](https://www.bls.gov/oes/current/oes_20940.htm#47-0000)**TABLE 10 A -MAY 2020 METROPOLITAN AND NONMETROPOLITAN AREA OCCUPATIONAL EMPLOYMENT AND WAGE ESTIMATES FOR NON-METROPOLITAN NEVADA**

Occupation	Est Total	Hourly Mean	Ann. Mean	Ann 10th Pctl	Ann. 25th Pctl	Ann. Median	Ann. 75th Pctl	Ann. 90th Pctl
All Occupations	92,240	24.12	50,170	20,240	27,590	42,660	64,270	84,810
Management Occupations	4,920	48.46	100,810	43,760	61,800	87,950	121,000	171,980
Architectural and Engineering Managers	50	68.64	142,780	88,490	100,850	126,670	161,270	#
Business and Financial Operations Occupations	2,660	31.86	66,270	39,190	49,830	64,020	79,500	97,180
Cost Estimators	70	32.45	67,490	43,290	50,010	65,500	80,030	103,100
Logisticians	50	33.68	70,060	52,910	59,730	70,930	78,500	88,460
Architecture and Engineering Occupations	1,810	40.03	83,260	46,490	61,040	76,810	97,520	127,300
Civil Engineers	270	52.03	108,220	52,740	73,220	97,190	128,270	167,130
Environmental Engineers	90	42.51	88,420	59,450	70,940	88,860	104,090	123,450
Industrial Engineers	30	43.36	90,180	66,780	72,570	82,210	105,960	131,130
Material Engineers	70	46.65	97,040	60,360	72,800	93,170	117,540	150,390
Mechanical Engineers	40	49.55	103,060	66,910	75,880	89,510	107,320	161,930
Mining & Geological Engineers including mining safety engineers	280	40.71	84,670	57,200	69,050	83,260	97,730	113,070
Engineers, All Others	60	54.02	112,360	46,590	84,380	106,450	153,180	170,650
Civil Engineering Technologists and Technicians	110	27.88	57,990	41,830	45,840	56,010	68,470	79,590
Electrical & Electronic Engineering	210	34.97	72,750	55,810	67,590	73,960	80,260	86,410
Environmental Engineering Technologists	80	25.03	52,060	34,900	40,500	48,640	63,620	76,800

Source: [https://www.bls.gov/oes/current/oes\\_3200006.htm#47-0000](https://www.bls.gov/oes/current/oes_3200006.htm#47-0000)  
Table #10 is continued on the following page.



**TABLE 10 B -MAY 2020 METROPOLITAN AND NONMETROPOLITAN AREA OCCUPATIONAL EMPLOYMENT AND WAGE ESTIMATES FOR NON-METROPOLITAN NEVADA - CONTIUNED**

Occupation	Est Total	Hourly Mean	Ann. Mean	Ann 10th Pctl	Ann. 25th Pctl	Ann. Median	Ann. 75th Pctl	Ann. 90th Pctl
Surveying and Mapping Technicians	60	25.98	54,040	31,610	35,680	50,420	70,640	79,830
Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	70	36.66	76,260	60,870	68,560	75,570	81,770	89,410
Life, Physical, and Social Science Occupations	1,900	33.21	69,070	33,920	49,490	64,000	80,430	103,170
Geoscientists, Except Hydrologists and Geographers	220	45.19	94,000	56,240	69,320	79,650	96,110	125,140
Construction and Extraction Occupations	12,070	27.07	56,310	34,950	42,960	53,530	67,970	80,770
First-Line Supervisors of Construction Trades and Extraction Workers	900	39.14	81,400	52,190	60,900	76,240	98,060	122,580
Operating Engineers and Other Construction Equipment Operators	960	24.05	50,030	35,290	39,670	47,650	57,770	66,640
Electricians	630	30.34	63,100	42,810	50,360	61,520	75,190	86,450
Plumbers, Pipefitters, and Steamfitters	210	30.05	62,500	44,470	53,330	59,960	67,830	82,730
Excavating and Loading Machine and Dragline Operators, Surface Mining	180	24.02	49,970	36,400	43,520	48,980	57,000	66,330

Source: [https://www.bls.gov/oes/current/oes\\_3200006.htm#47-0000](https://www.bls.gov/oes/current/oes_3200006.htm#47-0000)



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*Alianza’s mission is to transform the socio-economic conditions of the Coachella Valley so that people in all communities have opportunities to prosper. We envision one vibrant, healthy, and thriving Coachella Valley where people have a seat at the table for decisions that affect their daily lives..*

## ACKNOWLEDGMENTS

Sincere gratitude to the community members who participated in the listening sessions and agreed to be interviewed. Thanks also goes out to our study partners at the University of California Santa Cruz - Nate Edenhofer, J. Alejandro Artiga-Purcell, and Chris Benner.

We would also like to extend thanks to Eric Hayes and Quanfeng Zhou, who provided invaluable research support to complete this project.

We the authors remain solely responsible for any and all errors and omissions.